AMENDMENTS TO THE SPECIFICATION

Amend the paragraph found from page 2, lines 19-22 as follows:

~~These objects~~ The foregoing object of the invention is ~~are~~ achieved by the features stated in enclosed independent claims. Further advantageous arrangements and embodiments of the invention are set forth in the respective subclaims.

Amend the paragraph found from page 2, line 23 through page 3, line 4 as follows:

The present invention proposes as mechanism for server-side performance optimization abbreviated herein as SSPO which is based on conditional in-advance content delivery to browsers, ~~wherby~~ the condition is determined preferably by the current load of the content server(s). The present invention ~~allows to avoid~~ avoids or at least ~~to flatten~~ flattens extreme peaks in server load by using times of lower load to deliver content in advance[[:]].

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Amend the paragraph found from page 4, line 22 through page 5, line 6 as follows:

Web ~~Sites~~ sites can be represented as graphs, where the nodes are pages and the vertices are links. In such a graph, a weight can be assigned to each vertex, the particular value of which expresses the estimated probability for a user-initiated selection of the respective link. The current page represented the start node of the vertex, ~~wheras~~ whereas the target node is the page where the link points to. If a particular page is requested by the client, the server identifies at least one successor of the associated node with the (respective) highest estimated selection probability. Then, the one or more pages associated with the identified successors are delivered in advance, together with the requested page.

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Amend the paragraph found from page 5, lines 16-28 as follows:

The ~~WebBrowser~~ web browser is configured to use the SSPO Client as a proxy server. Each request the SSPO Client receives is served from the cache or forwarded to the SSPO Server. The SSPO Server receives requests from the SSPO Client and forwards these requests to the appropriate web server. Depending on the current load, the SSPO server may also send some additional request to the web server to ~~retreive~~ retrieve content to be sent to the client in advance along with the content explicitly requested. The SSPO client receives the requested content along with the content served by the SSPO Server in advance. The content that relates to the original request from the web browser is sent to the browser, while the content that was sent by the SSPO server is stored in the local cache for later use.

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Amend the paragraph found on page 6, from lines 7-25 as
follows:

According to a further preferred feature of the present
~~invention~~ invention ~~receiving~~ received transmission time
information associated to particular requests~~,~~ can be
transmitted back to the web server. Said server tracks said
information with the respective transmission and some simple
algorithm can be implemented which evaluates it as [[a]]
feedback information for controlling the amount of
additional content, i.e., in order to delimit, to increase
or decrease the delivered amounts of additional content. If
it turns out, for example, that a particular transmission
time is quite long, although the source web servers stands
under a small load, it can be concluded that there is some
bottleneck somewhere else along the transmission path
actually in use. Thus, respective measures may be
undertaken to increase the transmission rate as e.g., to
route along a different path, or, if this is not feasible,
to delimit the amount of additional content delivered to a
reasonable degree. This helps to avoid non-controllable and
unforeseeable increase in network traffic when the present
invention is very broadly implemented, for example in a
majority of end-user computers being requesters ~~requestors~~
of the network traffic.

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Amend the paragraph found on page 9, lines 15-21 as follows:

Without in-advance content delivery according to the prior art, an interaction ~~beetween~~ between client and server looks as it is shown in the left half of Fig. 2. This option is chose as well according to the present invention in times of high load at the server. As can be seen this is a sequence of explicit requests followed by explicit response fulfilling the task specified in a respective request – not more.

Amend the paragraph found from page 9, line 22 through page 10, line 7 as follows:

According to the present invention with conditional in-advance content delivery, the client-server interaction looks like that shown in the right half of the figures. This option is chosen by the server in times of low load. As ~~reveals~~ revealed from the figure, the book1 synopsis, the book2 synopsis, ~~and~~ and the UserId/password form is are sent in-advance by virtue of the present invention. Thus, the user sees the book1 synopsis while the book2 synopsis is being transmitted to the user computer's/telephone's/PDA's cache, or main memory, or into a dedicated harddisk buffer. If he decides to select book2 as mentioned above, the selected synopsis is moved from the cache locally on his computer system without a separate ~~tranmission~~ transmission being necessary. Thus waiting time is shortened remarkably for him.

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Amend the paragraph found on page 10 from lines 8-10 as follows:

Only the confirmation dialogue depicted last in both sides of the ~~figutre~~ figure is the same, because the purchase decision and execution cannot be predicted by any algorithm.

Amend the paragraph from page 12, lines 7-9 as follows:

With HTML, as ~~special~~ special software is required at the client side Web Browser 50, because in contrast to WML, HTML does not allow one to define decks that contain several pages.

Amend the lines 24-25 on page 12 as follows:

Here, servlets 70 are used which employ the mechanism
above.
described

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Amend the paragraph found on page 14, lines 5-13 as follows:

According to this preferred aspect, statistics are maintained during daily traffic on a specific homepage. They are based on weighted graph calculations. The contents are represented as nodes, the links being represented as vertices, and the access probability being tracked as a ~~vertice~~ vertex weight attribute. Any storage adequate when describing graph structures, for example tables, are adapted to store said weight values. In the drawings said different values are printed on respective vertices, each at the bottom of a respective arrow.

Amend the paragraph from page 14, lines 17-23 as follows:

Then he requests Page 2 at 92 and the current server load permits ~~to deliver~~ delivery of one page in advance. Then, from a plurality of two pages 2.1, and 2.3, having reference sign 94, and 96, respectively - page 2.1, 94 - would be identified for in-advance delivery, since it has a higher estimated selection probability - the value of 0,5 being higher than the value of 0,2, see the arrows - in the context of Page 2.

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Amend the paragraph from page 15, lines 10-15 as follows:

It is to be understood that in particular the client computer can be any kind of computing device, a small or a ~~more performant~~ <u>higher performing</u> one, covering the whole range from a small handheld device, like a PDA, or a mobile telephone, up to desktop computers, or even <u>a</u> server serving any plurality of end-user associated desktop computers.

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